

REMARKS

The application has been amended to place the application in condition for allowance at the time of the next Official Action.

The specification is amended to include section headings and to address a typographical error noted on page 11.

Claims 1-9 were previously pending in the application. New claims 10-14 are added. Therefore, claims 1-14 are presented for consideration.

Claim 1 was rejected as anticipated by German reference 1504597. That rejection is respectfully traversed.

Claim 1 recites a key sector independent from the other sectors and insertable between these sectors. Claim 1 also recites a control device disconnectable from the mandrel.

The '597 reference teaches three sectors, two labeled No. 2 and one labeled No. 3. These sectors are connected to each other by an actuating assembly and linking rods. When the mandrel of the '597 reference is moved to an unmolding position, the actuating device retracts smaller segment 3. As element 3 is being withdrawn to the interior portion of the mandrel, links 13 connected to the head of the actuating piston simultaneously or immediately thereafter move elements 2 towards the center of the mandrel. Such coordinated movement of the smaller segment 3 being linked to the larger segments 2 is not an independent

movement. Thus, the '597 reference does not teach a key sector independent from the other sectors as recited.

Moreover, links 13 are permanently connected (or at least not intended to be disconnected) to large segments 2. The links 13 are also permanently connected to the piston head which is permanently connected to the small segment 3. Thus, the mandrel and actuating device is a unitary structure. Since the links 13 and the head of the piston constitute part of the actuating element for displacement of movable sectors and since these elements are permanently connected to the sectors, the '597 reference does not teach or suggest a control device disconnectable from the mandrel as recited.

As the reference does not disclose that which is recited, the anticipation rejection is not viable. Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 2-9 are rejected as unpatentable over the '597 reference in view of LONG et al. 4,436,574. This rejection is respectfully traversed.

Claim 2 is rewritten in independent form and recites a key sector independent of the other sectors. Claim 2 also recites a control device for controlling the relative movement of the sectors, the control device being disconnectable from the mandrel. The analysis above regarding claim 1 is equally applicable to claim 2 with respect to the '597 reference.

The LONG reference does not overcome the shortcomings of the '597 reference. Column 3, lines 36-48 of LONG teach a rotary mandrel rotatably and permanently mounted on a shaft such that small segments 15 and large segment 13 are interconnected to each other as seen in Figure 3 of LONG. Column 3, lines 10-19 of LONG teaches the permanent connection of the segments to an actuating element.

Accordingly, the references fail to teach a key sector independent from the others and a control device disconnectable from the mandrel. Therefore, these elements are absent from the combination and thus would not have been obvious to one having ordinary skill in the art.

In addition, claim 2 further recites means permitting the transport and the rotation of the mandrel constituting two removable flanges adapted to the two ends of the mandrel. The flanges are connected by securement ties and provided in their center with a socket for connection to drive means for the mandrel in rotation about its axis.

LONG is offered for this teaching. However, as set forth above, LONG teaches a shaft 53 through the mandrel. This shaft is for rotation only. LONG does not teach that the shaft permits transport of the mandrel.

Moreover, the shaft of LONG is through the center of the mandrel. LONG does not teach two removable flanges adapted to two ends of the mandrel and connected by securement ties.

LONG also fails to teach or suggest that the flanges are provided in their center with a socket for connection to drive means for the mandrel in rotation about its axis. Since the '597 reference also fails to teach these features, the recited "two movable flanges adapted to the two ends of the mandrel" would not have been obvious in view of the proposed combination of references.

Claims 3-9 depend from claim 2 and further define the invention and are also believed patentable over the cited prior art.

In addition, the dependent claims include features not disclosed by the proposed combination of references. Claims 6 and 9 provide that the locking means are constituted by locks movable in translation so as to secure or release two adjacent sectors. Locks 27 of LONG are neither movable in translation nor lock two adjacent sectors. Rather, the locks 27 of LONG are rotatable to lock individual segments.

New claims 7-13 depend from one of claims 1 and 2 and further define the invention and are also believed patentable over the cited prior art. New independent claim 14 includes a key sector independently movable from other sectors and a control device disconnectable from the mandrel. The analysis above regarding claim 1 is equally applicable to claim 14. In addition, new claim 14 recites locking elements to lock the sectors to each other in the molding position. Support for the

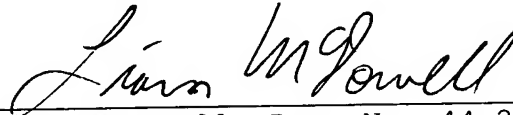
new claims can be found on Figure 4 and on page 7, lines 13-17, column 11, lines 12-17.

In view of the present amendment and the foregoing Remarks, it is believed that the present application has been placed in condition for allowance. Reconsideration and allowance are respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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